[Claims]

[Claim 1] A rim disk assembling device for a vehicle full face wheel, comprising:

a centering rod moving up and down along the center axis of a full face wheel;

a rotary table rotated about the center axis by a rotating means;

a hub hole fitting member disposed on the rotary table to radially position a disk by fitting to the hub hole of the disk;

a disk supporting member disposed on the rotary table to support the disk from the designed surface side of the area joined to a rim;

a rim supporting member moving down along the center axis together with the centering rod to support the rim disposed on the disk supported with the hub hole supporting member and the disk supporting member by pressing from above its rim flange portion;

a rim position restraining means radially positioning the rim by radially restraining the inside circumferential surface of a rim drop portion centered on the centering rod; and

a rod connecting means for connecting the centering rod having moved down along the center axis to the rotary table,

wherein the device is adapted to bring into pressed contact state the disk radially positioned with the hub hole fitting member and the rim radially positioned with the rim position restraining means by sandwiching them between the disk supporting member and the rim supporting member and by pulling up the centering rod connected through the rod connecting means to the rotary table while pressing down the rim flange portion with the rim supporting member.

[Claim 2] The rim disk assembling device for a vehicle full face wheel according to Claim 1, wherein the rod connecting means comprises:

a clamp portion formed at the tip of the centering rod;

a rod insertion hole formed in the center of the rotary table for the centering rod to be inserted into; and

a rod gripping device disposed on the underside of the rotary table to grip and fix the clamp portion of the centering rod inserted into the rod insertion hole and projecting from the underside and to bring the rotary table and the centering rod into connected state in which they can move as a single body.

[Claim 3] The rim disk assembling device for a vehicle full face wheel according to Claim 1 or 2, comprising:

a vertical motion rotary unit on which a rod pulling device for pulling the centering rod into action, a rim supporting member, and a rim position restraining means are mounted; and

a vertical motion frame to which the vertical motion rotary unit is connected to be rotatable and making vertical action like a single body, and connected to a vertical driving device for drive-causing the vertical action,

wherein the vertical motion rotary unit rotates like a single body with the rotary table when the disk and the rim are brought into sandwich-pressed contact state by setting the rotary table connected to the centering rod into pulling action by means of the rod pulling device.

[Claim 4] The rim disk assembling device for a vehicle full face wheel according to Claim 3, wherein the vertical motion rotary unit has:

a rim supporting member and a rim position restraining means mounted both on its underside;

a rod pulling device disposed in its upper part; and

a vertical motion table with a rod passage hole formed in its center for a centering rod to be inserted into to be vertically movable.

[Claim 5] The rim disk assembling device for a vehicle full face wheel according to Claim 4, wherein the rim position

restraining means comprises:

a plural number of radial restraining members disposed in the vertical motion table at about constant angular intervals around the centering rod, each made up of a holding case, suspended from a vertical motion table, urged downward, and vertically movable; and a pressing member installed in the holding case, radially movable, urged radially inward, with its inside end having a pressed portion, and with its outside end having a contacting portion for contacting the inside circumferential surface of the rim drop portion; and

a conversion guide member suspended from the vertical motion table to contact the pressed portions of the pressing members along with the downward motion of the vertical motion table, to cause the pressing members to extend radially outward, and to cause the contacting portions of the pressing members to press against the inside circumferential surface of the rim drop portion in the state in which the rim supporting member contacts the rim flange portion from above.

[Claim 6] The rim disk assembling device for a vehicle full face wheel according to any one of Claims 1 to 5, wherein the rotating means is a rotating device with a rotary shaft disposed under the rotary table along the center axis to rotate the rotary table.

[Claim 7] The rim disk assembling device for a vehicle full face wheel according to Claim 6, wherein the rotating device is a direct drive motor.